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EDITORIAL NOTES

COKE ORGANIZATION

"THE solid foundation laid in 1931 has enabled the Association to maintain its ranks intact in spite of the war, with all its difficulties and the possibilities of disruption due to misunderstandings." We quote this from a speech at a luncheon last week of the London and Counties Coke Association by Mr. R. W. Foot, founder-Chairman of the Association and now Joint Director-General of the B.B.C. Mr. Foot spoke of the need for a plan to guide the Industry from the present to the future. On what lines, in brief, are we going to approach the future of the smokeless solid fuel field? We have the foundation, the machinery, to accomplish much—and we feel sure that much will be accomplished provided we are sure in our aims. The L.C.C.A. has created that machinery. To-day the whole country is covered by coke associations; there is inter-working with the hard coke producers and the anthracite producers. The possibilities are immense; we have the organization designed to smooth obstacles and avoid pitfalls. We have good reason to be sure of ourselves and to advance boldly, but we must be certain in our minds of the paths we intend unhesitatingly to pursue. We have to decide whether we are a gas and coke industry, and particularly to what degree we are a coke industry. At the L.C.C.A. luncheon Dr. E. W. Smith, Director-General of Gas Supply, suggested that there is a disadvantage in our being known solely as a Gas Industry, when in fact our manufacture of coke is exceedingly important and, from the processed fuel point of view, represents our greatest thermal output.

Our opinion is that in the future we ought to pay more attention to coke; we do not hold the view that the Gas Industry makes and sells coke at a loss, on which, to our mind, fallacious thinking we have had something to say in the past. We think that future Governments will foster the use of smokeless fuels—solid and gaseous, and electricity—and may insist on the processing of raw coal. The question arises whether coke ought to be tied to gas manufacture—whether gas output and sales should dictate coke production, irrespective of the actual or potential demand for solid smokeless fuel. The demand for smokeless fuel will grow; the position that Gas Industry coke will occupy in relation to anthracite and coke oven coke will depend on how we regard the future now, how we assess the prospects of a market for coke more remunerative than we have yet experienced. Primarily we need a sense of perspective on the amount of heat required by the community and the possibilities of refined forms of energy—some less refined than others—meeting the demand. For example, if smokeless fuel replaces raw coal—and we think this is bound eventually to take place—we must be prepared to cope properly with all types of demand, spread out and sporadic. The coal consumer's cellar of to-day may, as far as potential heat content is concerned, be likened to a domestic gasholder. A coal consumer, in the normal way, stores coal against the periods of peak demand. Peak demands for heat are not meagre. Small householders store against the winter demand about 10,000,000 tons of coal. Translate this into terms of gas storage, bearing in mind that the total coal treated by the Gas Industry to-day is only 18,000,000 tons a year, and we arrive at something of a balanced picture—a picture which is sufficient to convince us, at any rate, that quickly to supplant raw coal either by gas or by electricity would be to cry for the moon. Which in no way blinds us to the fact that gas and electricity, *qua* refined forms of energy, are vastly to be preferred to solid fuel, smokeless or smoky. The time may come, and we hope it will come, when gas and electricity only are used for domestic purposes, but we think that millenium will not be reached in, say, 25 years after the termination of the present war, whenever that may be. We shall, of course, be glad if our thoughts are, in the event, proved thoroughly mistaken.

Rather do we visualize a transition stage between the use of raw coal and the use of gas and electricity—a transition stage, easily attainable, in which a large part of the community's heat requirements will be met by solid smokeless fuels. We believe that the Gas Industry has a vital part to play in this period of transition (the length of the period we will not conjecture), and that it should look to the smokeless solid fuel in manufactures as potentially a source of greatly increased revenue, not as a source of unremunerative business, not as a necessary evil but as a most helpful asset in every way—not merely financially. We have spoken of the foundations laid in the first instance by the L.C.C.A., whose latest annual report reflects how soundly they were laid. Through the country-wide coke organization now existing, war problems have been vastly eased, to the consumer's benefit. Co-operation has increased; technically the organization is full of promise. It covers hard coke and anthracite as well as gas coke. As we have said, the machinery is there. The use to which it will be put post-war depends on the Gas Industry's policy framed in the meantime. That it could be used with very great all-round advantage to the Gas Industry and the nation we have no doubt in our mind. What is our policy to be?

INDUSTRIAL GAS ECONOMY

MANY of our readers will by now have received copies of Fuel Efficiency Bulletin, No. 5, containing "Practical economy points for industrial gas users." This is one of a series of publications bearing on industrial fuel economy in general, issued by the Fuel Efficiency Committee of the Ministry of Fuel and Power. Of six so far issued, it is the first exclusively devoted to gas.

We announced a few weeks ago the appointment to the Directorate of Gas Supply of Mr. C. A. Masterman, whose primary duties would be to co-ordinate the work of the Directorate in connexion with the use of gas for war purposes. It is no secret in industrial gas circles that Mr. Masterman has been very actively concerned with the production of this Bulletin, and we only mention the fact because his past experience in gas utilization and his knowledge of the workings of the Industry are such as to give it considerable faith in any work which he undertakes. In fact, by the ready entrée which he enjoys to all branches of the Gas Industry—particularly in this case the B.C.G.A., the S.B.G.I., the large suppliers of industrial gas, and the Industrial Gas Centre Movement—it can be assumed that the Bulletin is in the nature of an "agreed" document. It is, therefore, deserving of the full support of the Industry, without which no bulletin dealing exclusively with the use of gas could be expected to be fully effective.

In surveying the whole field of the industrial use of fuels, the Fuel Efficiency Committee has made recommendations for the assistance of industries, of managements, and of operatives. Technical assistance is available to specific industries through their trades associations, and locally to factories by the setting up of Regional Fuel Efficiency Committees. Training courses in fuel use and economy are available and factory managements are encouraged (or may be required by the Minister) to appoint their own fuel efficiency officers either individually or co-operatively. In the case of gas used for industrial purposes the gas undertaking will often have its specialists with long experience

who are required to give all possible aid. Even if the local undertaking has no such previous experience, either it or the Regional Committee can generally make arrangements to obtain the help of specialists from other undertakings. Only by making use of this assistance will the most effective economies be made, and only by making these economies may it be possible to maintain the gas supply. It is to reinforce such efforts, and to indicate lines along which industrialists may profitably seek such assistance, that the notes contained in Bulletin 5 have been prepared. They do not profess to be complete, and will be followed by others as may seem desirable. The Gas Industry, too, will readily recognize that they are, as they claim to be, "hints," and not technical instructions demanding the introduction of new plant, of control chemists, or any conditions which might cause difficulties in these times.

Yet, simple and obvious as the hints may appear to be, it has actually been proved in instances where the attention of gas users has been called to "everyday" points such as these that economies in the region of 15 to 20% can be effected; and savings of this order will appeal strongly to the vast majority of gas undertakings in present circumstances. There can be few "industrial salesmen" to-day who regard the winning of new loads as a gain to their undertaking. If there be any such, it behoves their chiefs to keep a careful eye on them, lest trouble come upon them from the direction of the Regional Controller or the Directorate of Gas Supply, from whom, we understand, permission should be sought before giving any new supply, particularly in areas where there is the slightest risk of any shortage.

The urgency of fuel saving needs no further emphasis from us; indeed, we know that a great many gas undertakings are faced with a situation which brings it right home to them. They will, therefore, be grateful for Fuel Efficiency Bulletin, No. 5, and for any other help they receive in persuading the gas consumer, large or small, not to use a single therm more than is necessary. While it is the duty of every gas undertaking to supervise gas usage as far as possible, maximum economy cannot possibly be secured without the full co-operation of the industrialist, as we have frequently pointed out in the past.

A PICTURE OF THE DISTRICT

"ON scientific grounds it has been shown that gas is in a stronger position than any other fuel to supply the greater part of the fuel needs of a house. Gas and coke together should occupy an invulnerable position; they should give the desired service to the satisfaction of the individual user, the community, and the national fuel supply." With which view, expressed by Mr. L. W. Andrew in a Paper last Friday to the London and Southern District Junior Gas Association, there ought to be general accord. He added that to obtain this place for gas there must be a greater knowledge of the facts, a greater urge to sell gas on its real merits, and complete co-operation between every section of the Gas Industry and every manufacturer. And again we think there ought to be appreciation of this principle of approach towards a Gas Industry with a vastly extended service in the post-war period. We shall deal subsequently in the "JOURNAL" with the Paper, which was quite a remarkable one, and exemplified what we said last week about the standard of the contributions presented to and discussed by the Junior Associations. We hope that the implications of the Paper, which was enthusiastically discussed, will be studied. The Industry must know its strength; equally it must not lose sight of past and present weaknesses—and we regard it as wise to set out specifically to discover these weaknesses from within and at first hand, to ascertain to what extent we may pre-war have been living in a fool's paradise.

The Paper outlined the findings from a quest on the district by one engaged in the laboratory on the development of gas appliance design. Mr. Andrew's work in the Watson House Laboratories of the Gas Light and Coke Company is well known. In 1939, with thought of the possibility of becoming remote in a laboratory, with becoming to some extent divorced from the conditions on the district of supply, the Author spent about three months on the district. His object was defined—to check the technical performance of space heaters, the suitability of existing appliances, and the extent to which they were being used properly and were giving satisfaction. He was given a completely free hand, and decided to confine all visits to consumers who had not complained about their appliances. Laboratories, as he said, are familiar enough with complaints from the district, but they represent a very small proportion of appliances installed. For example, complaints regarding cookers of a half-million issue are of the order of a hundred or so a year. Does this imply perfection of the appliance, or the fitter, or the maintenance man? Is it enough to say that complaints represent only 0.1% and therefore all is well—well with design and well with performance? We think the answers were provided by the Paper. Visits ranged from the slums of the Tidal Basin and Holloway to the expensive houses of Hampstead and Virginia Water. Mr. Andrew found his quest of discovery diverting, educational both socially and technically, and, in a nutshell, "very useful."

Many may find the results of these visits, stated simply in the Paper, disconcerting. The fact, for example, that few consumers appreciated what a correctly set gas appliance looks like in operation, and what performance it can give, must give rise to a certain amount of thought not only on installation and maintenance, and incidentally on the constancy of gas quality, including pressure, but on how the public bases its opinion of gas, and expresses satisfaction with its use, on what is really inferior performance—in the case of fires, subnormal performance due to under-aeration, bad luting, mal-adjustment, and so on. In brief, a large section of the public does not know gas at its best. Then there is the public's hazy conception about cost. Mr. Andrew found that money spent on solid fuel was regarded as inevitable. Not so the pennies or shillings put into the prepayment meter. And—here is a point of significance in any future tariff planning—the user was unimpressed by any rebate received when the collector came, and equally unimpressed by the fact that part of the money placed in the meter might be for meter rent and the hire of appliances. Only confused notions existed about relative costs. Like was compared with unlike. The money put into an electric meter for the small amount of energy used in lighting and wireless was compared with the money put into the gas meter for the relatively large amount of heat energy needed for cooking, laundry, and so on; and a penny a unit sounded so much cheaper than a shilling a therm. The lesson is there—that the Gas Industry in its dealings with consumers must think, not in its own terms, but in those of the consumer. And the consumer's line of thought can only be discovered by investigation with an open mind.

From what he saw on his visits to consumers, Mr. Andrew made several constructive proposals, chiefly about space-heating appliances. Maintenance of the best performance at a known gas rate was a major point advanced—and this without attention from the gas undertaking for a period of five years. We must obviate the weaknesses of fragile radiants which discolour, of poor aeration after heavy usage, of unreliable ignition. We must look to the possibilities of the luminous burner, and realize that flueless heaters are very popular with the public, and that where ventilation is adequate and where the gas is low in sulphur they can be employed satisfactorily from the dual point of view of health and pocket. We must consider the capital cost of appliances in relation to their usage, and design and manufacture accordingly. But there is no need for us to detail the suggestions put forward. Broadly, the survey did show that a change of heart was needed in the Gas Industry and among the users of gas—that a gas appliance should be regarded not merely as an appliance with a certain maximum gas rate, but as a gas-using appliance which will give a definite service for a certain cost. And the Paper indicated the great value of close co-operation between laboratory and district personnel.

Personal

Mr. A. Cook, Engineer and Manager of the Warrington Corporation Gas Department, retired on superannuation on Sept. 30, for health reasons. He is to be retained as Consultant to the Department until Dec. 31.

Educated at the Leigh Grammar School, Mr. Cook served his articles in mechanical engineering under the late Sir William Collingwood at the Vulcan Locomotive Works, Newton-le-Willows. Subsequently he was articled to the late Mr. T. O. Paterson, Engineer and Manager to the Birkenhead Corporation Gas Department.

His first appointment was that of Deputy Clerk of Works at Birkenhead, where a large scheme of reconstruction was carried out in the Gas Department. Later he became Assistant Works Superintendent and afterwards served for three years as Assistant Works Superintendent to the Wolverhampton Gas Company. He went to Warrington in 1918 as Works Superintendent, and a year later was appointed Assistant Engineer and Manager. On the retirement of Mr. Haddock in 1925, Mr. Cook was appointed Engineer and Manager.

Mr. Cook went to Warrington at a very difficult time when, owing to the last War, the whole of the gas-making plant was badly in need of repair and in some cases entire replacement, and he lost no time in getting out a scheme of modernizing the plant and reorganizing the staff and seeing it carried through to a successful completion.

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Sir David Milne-Watson, Bart., D.L., has been elected President of the Junior Institution of Engineers in succession to the Rt. Hon. Lord Sempill, and will deliver his Inaugural Address at the headquarters of the Institution, Victoria Street, Westminster, on Dec. 12.

Obituary

The Chairman of the Northampton Gaslight Company, Mr. J. J. Martin, died on Sept. 16. Mr. Martin had been a Director of the Company since 1918 and succeeded Mr. F. Bostock as Chairman in 1940.

* * *

Mr. Augustus G. Wilson, who for over 20 years represented Messrs. Thomas Glover & Co., Ltd., in the North-Western District of England, died suddenly at his home at Eccles on Sept. 16. He was well known to gas officials in his district, and he will be greatly missed by his many friends and acquaintances in the Gas Industry. He leaves a widow and a son.

Letters to the Editor

The Function of the Chemist

Sir,—I was interested to read Mr. Evans' Address to the Midland Association of Gas Engineers and Managers in which he referred to the function of the chemist. The status of the chemist in the Gas Industry is not, generally, high, and he is usually regarded as being inferior to the engineer and quite often even to the assistant engineer and technical assistants. While the Gas Industry persists in employing partially-qualified chemists (otherwise "testers"), then such a state of affairs is bound to continue, and judging from the remuneration some undertakings are offering even now for "chemists" it looks as if the true chemist is not wanted.

However, Mr. Evans points out that the true chemist is of real value to the Industry, the Institution is prepared to accept as members chemists in responsible positions as long as they have certain qualifications (not necessarily the Higher Certificate), and you, Sir, in a recent Editorial, state that you "like to think of chemists and engineers as equals and collaborators." Yet the chemist is generally not regarded as being a very important person. For the good of the Industry I consider it is high time that the status of the gas chemist was defined.

It is necessary, of course, that the Industry should understand what it means by a chemist. Quite often in advertisements for gas engineers it is stated that applicants must be corporate members of the Institution, but I do not recollect seeing an advertisement for a gas chemist in which it is stated that the applicant must have a degree in chemistry or be an Associate of the Institute of Chemistry. The chemical industry generally recognizes these latter qualifications as being necessary to a chemist, so why not the Gas Industry?

The Gas Industry has to depend largely on young men of School Certificate or Higher Certificate standard for its supply of future technicians. At present many of these young men start in the laboratory, but after a time they realize they want to be gas engineers and not chemists, so they take the examinations of The Institution of Gas Engineers. I submit that if chemists and engineers were regarded as "equals and collaborators," then some of these young men would prefer to become chemists, and instead of studying part-time in gas engineering and ancillary subjects, would study part-time for a proper qualification in chemistry (such as the London University B.Sc. or the A.I.C.). At the same time they would be gaining experience on the works and would, eventually, be true chemists. Some of them would, perhaps, follow up their studies with gas engineering or chemical engineering. In my opinion these men would be invaluable to the Industry.

The Gas Industry is dependent as much upon its chemists as on its engineers, and the sooner this is recognized the better.

Yours faithfully,

Sept. 23, 1942. "Fuel Technologist."

Real Prepayment Metering

Sir,—The appeal to dual coin slot meter consumers to use shillings instead of pennies, so pointedly made by Mr. A. E. Sylvester in the "50 Million Pennies Locked Up" display which he has issued to the Gas Light and Coke Company's showrooms in London, to which reference was made in the "Journal" of Sept. 16, ought to set us seriously to think of some way out of a problem that is always with us. Consumers, through the so-called prepayment types of meter (although they are not so, so far as the gas undertakings are concerned), with very few exceptions refuse to believe that a shilling in the slot gives them as much gas as 12 pennies. They think they get "the turn of the scales" in their metered gas as they do with their grocery rations; why therefore do gas undertakings provide two-coin meters which must cost more to make, maintain, and collect from than the single coin types?

As it is more than likely in the future that the penny will be a smaller "buyer" than ever it was before, will not post-war conditions be best served by one-coin meters, and 6d. ones at that? Such were my first thoughts after admiring Mr. Sylvester's effort to elicit help from consumers in lightening the burdens of transport of money from consumers' premises. Second thoughts suggested—why put coins into meters at all, with all the troubles of setting and checking the correct valve openings for the coins, cash lying idle for weeks or months, risk of pilfering, with possible damage to the meter by the thief, collection troubles, with bad coins "stuck up" or passed through.

If I had to supply gas to a new housing estate after the war I should put in meters with an outside key-operated valve. My collector for the district or the estate would be responsible for regular visits to each consumer to key on and take the cash for the amount of gas required with, of course, a small surplus for reserve. Visits twice a month would serve for this, but as the collector holding the key would live in the district the supply of gas need not run out at any time on any meter. Advantages in such an arrangement include: Cash-with-order business; no bad debts or likely damage to meters; no transport problems; meters would cost less to buy and maintain; more constant check on consumption; the collector would be a regular canvasser for new business and be able to do minor adjustments to fittings, and generally maintain sales contact with the consumer and the company.

The type of meter referred to is not altogether new, and the experience of its use already should serve to show that it ought to have consideration in our post-war planning. As a possible alternative to the meter with the outside key-operated valve I should favour the metering of gas by tokens, as described in my letter which you published in the "Journal" of July 8 last. Instead of coins, specially made plastic or metal tokens to the appropriate value would be used in the slot meter or a cheaper type to take tokens only. The tokens would be bought in bulk at the outset, and at the time of the collection the collector could sell back an appropriate number of the discs to the consumer for cash. Such an arrangement provides a true prepayment system, involving no risk of loss through tampering with the meter, and obviating the difficulties arising from large quantities of coinage lying idle for long intervals between collections. Token metering has worked well on the Continent, and there is no reason why it should not work well here.

London, S.W. 1. Yours faithfully,

Sept. 23, 1942. "Token."

"Gas Industry of the Future."

The Reprint of these articles will shortly be dispatched to those who have applied for copies. A very limited surplus is available to supply further orders, which should therefore not be delayed. Price one shilling net.

A Meeting of the Central Executive Board of the National Gas Council will be held at Gas Industry House on Oct. 13 at 2 p.m.

A Meeting of the General Committee of the National Federation of Gas Coke Associations will be held on Tuesday, Oct. 13, at Gas Industry House, at 11 a.m.

The fact that goods made of raw materials in short supply owing to war conditions are advertised in the "Journal" should not be taken as an indication that they are necessarily available for export.

FUEL PLAN

[Contributed]

Our recent series on "The Gas Industry of the Future" has given rise to much thought and to the expression of views. We publish below the opinions of a practising gas engineer on how, from the present, we may approach the future with a measure of confidence.

THE Gas Industry has a great future and should be made capable of taking its place in any fuel plan. Up to the present, however, no master scheme has been devised as to how this place should be filled. Time is getting on, but as an Industry we are no nearer even preliminary agreement on the main issue, which is unity. Alterations within our own administration and in relationship with allied fuel industries are necessary. To make this feasible we need an agreed policy between the many units of the Industry.

The average service to consumers is good, perhaps better than that of any other public utility. Competition, as we knew it pre-war, is probably dead, and service will be the criterion of consumers' preference for a particular fuel. In our service of the future we might well include fixing the right appliance for the job, or being bold enough to decline the business ; and we must ensure that appliances give their best performance. Attention to our consumers' needs and appropriate design of gas-using equipment must be unsurpassed by any other fuel industry, and the price of gas must be attractive.

The "therm" with its accompanying funny little man was an excellent idea, but it has been ruined by having a value which no ordinary person can grasp. Should the Industry decide to concentrate on one calorific value, the therm would be a value which most people would readily understand, and perhaps the coming generation will be able to work out what 100,000 B.Th.U. will accomplish.

National gas price levels, or something approaching this, would strengthen the Industry. For the sake of simplicity it can be argued there are four classes of users—coin meter, credit meter, commercial, and industrial. Much satisfaction would be given were it possible to fix attractive gas prices for each class. Tariffs may have to be planned for a region, but about this, as well as calorific value, national circumstances, particularly industrial needs, may compel us to plan nationally. In any case, our completed plans for the post-war times must be nothing short of the grand scheme. The grand scheme will require brains to conceive, energy to execute, and determination to operate. Let us plan big; let us think of this well beforehand, and condition our minds to something really outstanding in the way of fuel evolution.

The performance efficiency of consumers' appliances, both gas and coke, must be comparable all over the country. This aim would imply gas of a single specification, and coke at of least two classes available for all areas—an aim which could be attained by co-operation between gas-producing stations. The solid fuel, which we must provide for some years to come, must be of the classes suited for either domestic or industrial use. We should not try to satisfy all markets with one class of fuel. Even with present carbonizing plant much could be done in this direction ; the hard cokes and soft cokes available could well be directed to better and more appropriate uses.

The background of the Gas Industry is one of gradual growth and increasing strength. It has nearly held its own with defects, but a uniform policy would improve its position and would increase its overall efficiency to cope effectively with all fuel competitors.

In particular, ownership is the major problem. It will be hard to divorce gas undertakings from their company and municipal owners, but a solution is offered to this barrier to unity. The joint board principle, with a difference, seems a reasonable way to interest the various owners of undertakings. Something attractive, fair, and profitable must be offered to all the owners of undertakings, something which they can enjoy in common, and something which will benefit the Industry and its consumers. A joint board in its present form is the co-ordination of several councils, urban districts, and the like in the formation of one body to provide a service or commodity throughout the respective areas of the constituent members. This appears nearly an ideal for a group or body, and to gain the unity, attraction, and profit required it is suggested that joint boards should be formed of reasonable size, and that all the parties should have a fixed percentage share of the capital investment or value of the joint undertakings, with a proportionate share-out of profits. In addition, the joint boards should have a master board for the whole country.

The financial interest would seal the relations between companies and municipal bodies, and as the boards would be controlled by representation there would be no need fundamentally to alter the ownership. The profits would flow to the interested parties and the control would be of a commercial character. Such a scheme has the merit of giving a community a real interest in the success and prosperity of its gas supply authority. To get from this the best for the Gas Industry, the boards should be linked one with the other, the gas mains following the post-war reconstructed highways.

In passing, it might be recorded that something is to be learned from all forms of public utility organization. Each of the different forms of ownership has one important advantage. The municipal concern is the best financed, the company concern has the greatest freedom, and the holding company has the largest and widest interest.

In the future, heavy expenditure will be called for, and if this is boxed into a small period it will thwart the aim of attractive pricing. The building of new gas-works must be undertaken carefully with the view of gradually eliminating out-of-date works, bad layouts, inefficient producers, those stations badly placed geographically—always keeping in mind the demand for solid fuel, the trend of gas-producing inventions and expenditure in relation to useful need and general improvement. Long-term financial policy would seem the most appropriate.

A study of industrial development will show us the importance of arriving at some unified scheme. Let this scheme be wide enough to cover the whole country. Regional matters are details and should rightly follow the main scheme, not precede it. If we could agree on broad principles, the major ditch is crossed.

In forming groups of undertakings, functional grouping is perhaps not so important as geographical grouping. We must be prepared to build our gas-producing stations at the most advantageous places, and not necessarily conclude that the existing large works are going to be the most beneficial to our future. In some cases the only merit of large producing and supply concerns is their organization.

An ideal unit for gas production can be planned on general lines. The principles governing the ideal works are good geographical position, and plant capable of making the specified quality of gas, producing reactive and hard cokes, and using up surplus coke for gas production so as to co-operate fully with the coke oven industry.

If detail work for the future is to be pursued, then matters concerned with regional grouping, such as existing loads, manufacturing facilities, potential load, diversity, and gas storage capacities, must be kept in mind. Sub-regions must have load diversity to balance-out income and thus preserve prosperity. Whereas a group could afford to give service in unprofitable areas, there are very few single undertakings willing to bear such expense.

During the past ten years or so, the Gas Industry has been forced off profitable domestic loads, which, however, have been replaced by industrial loads. But the result has been lower returns per manufactured unit. Concentration on rebuilding our domestic load is essential.

Self-seeking and manoeuvring for position should be avoided, and the overall efficiency of the Gas Industry, which is on the low side, must be raised. Those undertakings indifferent to national gas unity are a hindrance ; those that just want to be left alone are a bad example to others; as for the manoeuvrers, they are endeavouring to position themselves prettily at the expense of the Industry at large.

We seem willing to acknowledge one another's technical achievements, but too often we seem wilfully to ignore commercial accomplishments; the while several undertakings provide examples of forwardness and sound judgment.

An enormous amount of work is involved in planning, and a wide circle of technical, commercial, and administrative activities stands to be viewed. We may be aware of this, but we are tardy in acting on the knowledge. The most serious rift in our Industry is to be healed, not by executive recommendations, but by the actions of the owners of undertakings. Executives should keep their boards and committees informed of the movements now taking place, but, failing some definite, broad outline of future policy, much of the preparatory work of executives will be wasted. Again, prolonged negotiations are hindering our war effort. Each is doing what he can individually to assist the Government in its war plans, but as an Industry we seem to be failing lamentably in our relations with the Government. This failure could be avoided if those planning for us realized that first and foremost we must be of one mind, adhering to one policy—a policy free from political interference.

Substitute for Rubber

Referring to our editorial comment on the rubber situation ("JOURNAL" of Sept. 16), Messrs. Clough (Croydon), Ltd., write to say that a good quality metal-to-metal jointing in powder or sheet form (*e.g.*, "Suprete," manufactured by the firm) could be used with confidence in the sealing of purifiers and the jointing of pipes.

The material, they add, is reasonably competitive in comparison with rubber and is easy to use. Metal-to-metal jointings are guaranteed to seal securely all joints used in connexion with high pressure, superheated, and saturated steam, water, gas, petrol, benzole, solvents, acids, caustic liquors and vapours, oil, toluene, ammoniacal and alkaline solutions.

The firm would be glad to supply gas engineers with any further particulars of their product.

LONDON AND COUNTIES COKE ASSOCIATION

NINTH ANNUAL GENERAL MEETING

THE ninth Annual General Meeting of the London and Counties Coke Association was held at Grosvenor House, Park Lane, London, on Sept. 21, the President, Mr. Frank H. Jones, M.Inst. C.E., presiding. On the proposition of Mr. A. E. Sylvester, seconded by Mr. T. C. Battersby, Mr. Jones was unanimously re-elected President for the ensuing year.

Colonel H. C. Smith, who had been elected Executive Chairman at a meeting of the Central Committee earlier in the day, presented the Annual Report and Accounts. Before reviewing them, he referred to the resignation of Mr. R. W. Foot, Chairman of the Central Committee since the inception of the Association in 1931, consequent upon his appointment as Joint Director-General of the B.B.C. Mr. Foot, he said, was largely responsible for the formation of the Association, and it was due to his personal efforts that it had developed in the way that it had and with such success. He would be greatly missed, and they offered him every good wish for the future in the important position he now occupied.

Dealing with the Annual Report, Colonel Smith explained as to coke prices increases in the area and the levies on that coke, and said that the original levy of 1s. 3d. per ton was to finance the importation of coke into the Association's area to satisfy the demand in those districts where the demand exceeded the supply. During 1941 a considerable tonnage of coke was imported, the fund raised by the levy being used to enable this imported coke to be sold at schedule prices. Early in 1942 it was realized that there was surplus coke available in certain parts of the area which could be moved to those districts where there was shortage at considerably less cost than would be incurred by importing coke from outside the area, and a scheme for using the levy fund for this purpose received the approval of the Ministry. Under it coke may be sent from a producer who has a surplus to a buyer in any district outside the producer's normal area of supply, the producer being paid the net average rail price at works received for the six months ended Dec. 31, 1941, plus authorized increases since that date, the coke being sold at schedule prices. Any loss on such transactions was financed by the levy fund. Under the scheme the nearest available coke should be obtained, and if no coke was available in the area then the scheme applied also to other districts; for instance, coke could be brought from the Midlands, Yorkshire, or the North-East Coast under the same scheme. Movements of coke under the scheme were managed by a committee set up by the Ministry of Fuel and Power, consisting of six representatives of gas coke (five nominated by the Association and one by the National Federation of Gas Coke Associations), three representatives from the British Hard Coke Association, and two from the Ministry. Mr. A. E. Watson, a Ministry official, was Chairman of the Committee and Miss Wooster had been appointed Secretary. The day-to-day business of the scheme was managed by Mr. W. L. Boon and Mr. L. O'Connor, coke supplies officer of the Ministry, and the actual movements of coke were operated through the Wholesale Coke Company. In working out the scheme they had received every assistance from officials of the Ministry, who had been extremely helpful and had given sympathetic consideration to any suggestions for equalizing the coke position. It had been made quite obvious that while the Government policy was to keep the selling price of coke to the consumer, as with other commodities, down to as low a level as possible, where the appropriate machinery existed within the Industry that machinery should be used to the fullest possible extent, the minimum degree of Government control being imposed.

The Chairman then referred to the National Federation of Gas Coke Associations, and said that a year ago Mr. Foot had told them that the Federation had only eight members, whereas the whole country was now covered by coke associations. Through the Federation, the L.C.C.A. had connexions with other associations, such as the British Hard Coke Association and the South Wales Anthracite and Dry Coal Committee. A tripartite committee had been formed of these three bodies with the object of furthering the interests of smokeless fuel. The tripartite committee had a very active technical sub-committee, which was responsible, under the leadership of Mr. Boon, for the preparation of the booklet entitled *Producer Gas Plant for Industrial Purposes* and the *Memorandum on the Utilization of Solid Smokeless Fuel for Heating Services and their Place in the Planning for Post War Reconstruction.* The technical sub-committee was continuing to meet, and it was hoped from time to time would produce booklets of value in furthering the war effort and also in aiding post-war reconstruction. Mr. Boon, representing the three industries forming the tripartite committee, was now serving on several Government committees.

Relations with the Coke Distributors' Branch were, if anything, firmer than they had ever been, and tribute was paid to Mr. John Charrington, Chairman of the Branch, and Mr. Jack Hopper, Vice-Chairman, together with Colonel S. Flowers, Secretary, who continued to give support and valuable assistance to the Association.

The tonnage scale certificates scheme started in 1939 was now complete and approximately 4,000 certificates had been issued. These certificates were very important and had to be observed by all producers. They were started in July, 1939, as being the best way to meet the hard coke producers' request for equal prices for gas and hard coke, and they gave the distributors the benefit of being able to buy hard coke at the tonnage scale certificate price.

The technical work of the Association had been carried on, although necessarily in an abbreviated form. They had, however, been able to maintain all the threads of their technical department, and in no case had a member made an application to the Association for technical service which had not been dealt with.

An important development during the year was represented by the steps taken to enlarge the agricultural utilization of coke.

Important developments were taking place in agriculture, in many of which heating treatments such as for grain drying and grass drying were being employed. Solid smokeless fuel was ideal for this purpose, and realizing the possibilities in this connexion the Committee had appointed a fully qualified agricultural adviser to the technical staff. An important brochure on *Combined Harvesting and Grain Drying* had been prepared, its importance being recognized by the Ministry of Agriculture, who had given priority for its issue.

Colonel Smith concluded with a warm tribute to the staff. There could be no doubt, he added, that the existence of the Association had made the control of coke, which was obviously necessary in wartime, much easier than it otherwise would have been, and the experience they had gained during the war should be invaluable in times of peace.

The report and accounts were adopted on the proposition of the President, seconded by the Chairman.

Miss Wooster, General Secretary, reported the following county nominations for the composition of the Central Committee for 1942–43:

County.	*County Chairman.*	*County Representative.*	*Alternative Representative.*	*County Advisers.*
Bedfordshire	Mr. W. Phillips.	Mr. W. Phillips.	Mr. H. G. Ruggles.	Mr. H. G. Sole. Mr. R. Turner.
Berkshire	Mr. D. H. Helps.	Mr. D. H. Helps.	Mr. J. G. Abbott.	Mr. J. G. Abbott. Mr. D. H. Helps.
Bristol and District Coke Committee	Mr. C. H. Chester.	Mr. C. H. Chester.	Mr. J. Wesley Whimster.	Mr. J. Wesley Whimster. Mr. Noel Smith.
Cambridge and Hunts	Mr. J. Hunter Rioch.	Mr. J. Hunter Rioch.	Mr. R. Prince.	Mr. R. Prince. Mr. C. B. Staniforth.
Devonshire and District Coke Committee	Mr. G. H. Bolton.	Mr. G. H. Bolton.	—	Mr. R. C. Taylor. Mr. F. Blackburn. Mr. H. H. Brown.
Essex	Mr. F. N. Howes.	Mr. F. N. Howes.	Mr. M. L. Smith.	Mr. J. Grayston.
Hampshire	Mr. S. E. Whitehead.	Mr. S. E. Whitehead.	Mr. F. A. Ricketts.	North—Mr. F. A. Ricketts. South—Mr. E. W. Collins.
Herts and Bucks	Mr. T. C. Battersby.	Mr. T. C. Battersby.	Vacant	Herts.—Mr. J. F. Haseldine. Mr. E. Stace. Bucks.—Vacant.
Kent	Mr. F. A. Gulland.	Mr. F. A. Gulland.	Mr. G. le B. Diamond.	East—Mr. R. H. Ruthven. West—Mr. J. H. Donaldson.
London	Col. H. C. Smith.	Mr. E. V. Evans. Col. H. C. Smith. Mr. A. E. Sylvester.	Mr. C. M. Croft.	Major J. E. Blow. Mr. S. C. Colwell.
Norfolk	Mr. R. A. Weston.	Mr. R. A. Weston.	Mr. J. H. Greenacre.	Mr. J. H. Greenacre. Mr. V. E. Harston.
Oxford	Mr. W. E. Caton	Mr. W. E. Caton.	Mr. W. F. Caton.	Mr. W. F. Caton. Mr. F. W. Hunt.
Suffolk	Mr. A. W. Mather.	Mr. A. W. Mather.	Mr. T. V. Johns.	Mr. H. R. Wimhurst.
Surrey	Mr. E. L. Nicholas.	Mr. E. L. Nicholas.	Mr. B. Long.	Mr. B. Long. Mr. E. L. Nicholas.
Sussex	Mr. P. E. Browne. (Mr. S. E. Knowles, Vice-Chairman.)	Mr. S. E. Knowles.	Mr. L. G. Humphreys.	East—Mr. S.W. Hammond. West—Mr. S. James.

On the motion of Mr. F. A. Gulland, seconded by Mr. D. C. Cross, Messrs. Cash, Stone & Co. were reappointed auditors for the ensuing year, and the meeting closed with a hearty vote of thanks to the staff on the proposition of Colonel H. C. Smith. Mr. Boon and Miss Wooster briefly responded.

The Annual Luncheon

The Annual Meeting was preceded by a luncheon at Grosvenor House attended by about 150 members and guests, representing all the kindred associations.

Following the Loyal Toast, Mr. R. W. Foot, Joint Director-General of the B.B.C. and founder-chairman of the Association, proposed the toast of the "The London and Counties Coke Association." When he was called to the B.B.C. last year, he said, he gave up his executive work for the Association, but remained for a time as the nominal Chairman. He realized, however, that for the rest of the war his connexion with the coke industry could not be reconciled in any sense with his active work for the B.B.C., therefore, he had resigned. He paid tribute to Colonel Harold Smith, who had stepped into the breach. The solid foundation laid in 1931, he continued, had enabled the Association to maintain its ranks intact in spite of the war, with all its difficulties and the possibilities of disruption due to misunderstandings over Government control of prices and suspicions of interference. No one could tell whether in the future their product would be made in exactly the same way or in the same quantities, but it was important that every industry should have a plan to guide it from the present into the future, and not from the present into the past, and there must be strong, upright, courageous leadership to lead the Association into the new world.

Mr. Frank H. Jones, President, responding, said the Association would remember with gratitude all that Mr. Foot had done and they wished him well in his new office.

Colonel H. C. Smith, Executive Chairman, proposed the toast of "The Guests," and said it was strange to count Mr. Foot among their number. He welcomed Mr. W. G. Nott-Bower, Deputy Secretary of the Ministry of Fuel and Power, who had applied himself to acquiring first-hand knowledge of coke production. Another distinguished guest was Dr. E. W. Smith, Director-General of Gas Supply, and they also welcomed Mr. E. V. Evans, President of The Institution of Gas Engineers.

Mr. W. G. Nott-Bower, Deputy Secretary of the Ministry of Fuel and Power, in response, said that the relations of the Civil Service with all the representatives of the Industry had been admirable and were daily growing pleasanter.

Dr. E. W. Smith, Director General of Gas Supply, who also responded, said that, while he hoped sincerely that it would never be necessary for the Gas Industry to be nationalized or run by the Government Departments, his experience within the Government Department prompted him to say definitely that it was essential that there should be a Civil Service of the type this country now enjoyed. They had not only a new Minister, but a new set-up in the Civil Service. He had received letters from all over the country urging that the Gas Division should not be run by the coal section of the fuel industry. There had been a feeling that gas was only an appendage of the coal section, but there was never anything further from the truth. There was a disadvantage in their Industry being known purely as the Gas Industry. The fact was that they took coal and sold the products, and of those products twice the heating value of the gas made was sold as coke. They were more a coke industry than a Gas Industry. Up to the time when the L.C.C.A. was formed coke was practically neglected. Big advances had taken place but there was still a great deal to be done, and whatever co-ordination or regionalization came about after the war, or before it was over, it was going to be necessary to give greater attention to coke than had ever been given to it in the past.

Mr. E. V. Evans, President of The Institution of Gas Engineers, also replying, recalled that the Institution last year appointed a number of Committees of Enquiry, one of which was to enquire into and to make recommendations on coke grading and on the properties of coke in relation to domestic and industrial utilization. That committee had prepared its preliminary report, which would be referred to the Gas Research Board. One of the big problems to be considered was the development of the domestic market, and whether or not the coke they were making to-day was suitable for its purpose, or whether it should be treated in order to make it more active.

Mr. A. E. Sylvester briefly proposed the toast of "The President," and Mr. Frank H. Jones responded.

WARTIME MISCELLANY

Discussion on Paper by J. Powdrill to the Wales and Monmouthshire Association, Sept. 10—see "JOURNAL" of Sept. 23.

Mr. **W. H. Johns** (Swansea) agreed, in principle, the need for standardization of appliances, and he referred to the consideration which this question was receiving at the hands of the Post-War Planning Committee of The Institution of Gas Engineers. He agreed, too, that standardization of prices of gas appliances was a matter of primary importance. It was unreasonable that there should be such a variety of prices throughout the country, as also that the facilities to acquire these appliances should differ in different districts. As to standardization of gas charges, Mr. Johns said he was afraid that uniformity was a matter of impossibility, but he recognized the need for scientifically-designed and attractive tariffs, through the introduction of which he felt confident that an increased utilization of gas would be assured in the post-war years. The speaker drew particular attention to the Scott Committee's advocacy in relation to the supply of gas, water, and electricity to urban areas. He reviewed the suggestions contained in the Committee's report as to the means whereby such supplies could be afforded, and, referring in particular to supplies of gas, he mentioned the suggestions that this might be achieved by the extension of existing mains, by the amalgamation and linking-up of undertakings, by the extension of the holding company system, &c., and he went on to remark on the Committee's suggestions as to the development of such schemes, with or without Government assistance.

Mr. **W. Clark Jackson** (Neath) referred to the fundamentals of gas development—commodity, service, price, and administration. He emphasized that the commodity which the Industry had to offer was a first-class commodity, but it was necessary to ensure that its quality should at all times be constant. He knew that there existed some wonderful examples of care and attention to the question of maintaining a standard quality, but unfortunately there were also many instances, particularly in the case of smaller undertakings, where fluctuations in quality were far too prevalent. The speaker felt that the Industry would be wise to follow the example of the large business houses, who built their trade on an ability always to supply a dependable article. On the question of service, too, the large business houses could be copied with advantage. This service would have to be extended free, when it would be found (as the speaker himself had found) that it became a handsomely paying proposition, by virtue of an increasing consumption beyond the most sanguine expectations.

As to the price of the commodity, the speaker felt that the all-important factor was that the price must be economical, otherwise, despite the value of the commodity and of the service, no advantage would be taken of the availability of the product. Referring, in particular, to slot meter consumers, Mr. Jackson felt that in the past the case of the slot consumer had been badly neglected, the custom of charging a flat rate over and above the price to the ordinary meter consumer, regardless of the consumption, being, in his opinion, onerous and unfair. He had investigated the possibility of removing this discrimination, to do which he had taken the trouble to ascertain, step by step, the minimum additional charge which the slot consumer could be expected with equity to bear. He had scientifically tackled the problem by ascertaining the return necessary, over and above the price of gas to ordinary meter consumers, to cover the cost of meter, collection of monies, and in the provision of free installations and maintenance. Having found this extra cost, he had inaugurated a system of charge whereby the consumer paid for the service in the initial scale ; but once that datum was reached, the charge for any gas subsequently consumed became identical to that charged to ordinary consumers. The system had been tried, and its success could be gauged from the fact that, in three years, the sale of gas to slot consumers in the particular area in question had been doubled.

On the question of administration Mr. Jackson felt that company directors (who had the opportunity of attending meetings and of participating in discussions) should accept this opportunity far more freely than they had done in the past, as the lack of participation on their part in matters which were directly their concern was bound to have a detrimental effect upon the administrative side of the Industry. There were too many instances where the administration was of a very poor character indeed, and the sooner this state of affairs was remedied, the better would it be for the Industry as a whole. The speaker could plainly see that the number of undertakings operating as individual units was bound to be materially reduced in the future, and that the "big brother" idea would have to come into effect. The successful unit of the future would have to be on a much bigger scale; there existed any amount of room in the Industry for improvement in administration, with benefits to the smaller undertakings now only within reach of the larger undertakings, and with corresponding benefits to the gas-consuming public.

Mr. **W. F. Edwards** (Bridgend) referred to former speakers who had expressed the view that "the house should be put in order." He felt that the voice of ownership should be heard through the medium of company directors and members of local authority gas committees.

Mr. **C. L. Singleton** (Chepstow) expressed agreement with the need for standardization of appliances, but also felt that the fitting of appliances should carry with it a protective responsibility, in the form of regulations similar to those imposed by water supply undertakings. Under existing arrangements, appliances were being fitted by ironmongers, local plumbers, and the like, without the need to conform to any conditions; while the absence of any specified require-

ments resulted in the sale of gas appliances (oftentimes of inferior quality) by anyone who felt so disposed. If conformity with definite requirements became a necessary condition of assent by the gas undertaking, this state of affairs would soon cease to exist, and the good name of the Industry would be more easily maintained.

Mr. **K. E. Tiddy** (Carmarthen), referring to the selling price of appliances, said he felt that the problem should be tackled downwards, instead of being tackled from the bottom upwards. He considered that this could be achieved by the formation of Regional Marketing Groups, and felt that if these took the form of small groups on the pattern of existing Mutual Aid Groups, unanimity could easily be achieved.

Mr. **B. J. Bell** (Cardiff) referred to the fact that the question of standardization of appliances was a matter which continued to receive the consideration of The Institution of Gas Engineers, but he felt that when standardization was looked upon merely from the viewpoint of reducing the number of types of appliances, the proposal presented difficulties which he did not think could be easily solved, and he was of opinion that complete standardization was impossible. Perhaps of greater immediate importance was the question of interchangeability of parts, so that parts could be used irrespective of the source of purchase. Standardization of appliances would not have any real beneficial effect for many years—not until the total number of appliances at present on the district was eliminated and replacement parts required for such appliances were no longer necessary. From whatever point of view standardization was considered—either completely or partially—they should bear in mind that there would be no immediate large-scale effect, but that a number of years would necessarily elapse before the benefits would be felt. As to standardization of selling prices of appliances, the speaker wondered how far this was really necessary. He had no evidence of any great difference in prices within any area, and he felt that really this was not a question of major importance at the moment.

Looking to the future, Mr. Bell wondered whether consumers would be able and/or willing to purchase high-grade appliances, and he reminded the meeting of the possibility of a reversal of policy, under which a return to simple hire (upon which the Industry had been built) might become an economic necessity. Perhaps the Post-War Planning Committee might have to consider whether sales of appliances were likely to continue in the future as in the past, and if so, its members would doubtless bear in mind that competition was usually concentrated on simple hire, and not on outright sale or on hire purchase. In the speaker's mind, the question of importance was not so much the standardization of prices of appliances, but of future policy.

Mr. **R. J. Auckland** (Cardiff) alluded to reference in the Paper to the effect that the increased cost of gas production could not be offset by any new processing methods, and he therefore considered that efficiency would have to be the real characteristic of the Industry's future policy. He would not agree that an undertaking, because it was small, was inefficient; there were numerous cases of small undertakings which were run quite as efficiently as their larger counterparts; but he felt that if the smaller units were to continue, they would have to co-operate in endeavouring to ensure the highest efficiency in regard to manufacture and administration, particularly administration. Unless linking-up of undertakings was done within the Industry, compulsion from some other source might conceivably result.

One of the most important matters dealt with in the Scott report was the question of uniformity of gas charges. How this could be attained he did not know, but he emphasized that the Industry would have to give equal facilities to all consumers if it was to be considered a national asset. He mentioned that in some of the smaller districts of S. Wales the number of slot meter consumers was considerable, and that some undertakings have a preponderance. He expressed entire agreement with the opinion of a former speaker that the Industry should not seek to profit from the additional charge met by the coin meter consumer, by continuing the charge regardless of the consumption. He held the view that the extra charge on gas for free installation, &c., was usually discharged in the earlier part of consumption, and mentioned that a system providing for this additional charge on the first stages of consumption only had operated at Cardiff for many years past, with satisfactory results.

As to post-war planning, Mr. Auckland referred to the critics who so loudly proclaimed that the present was inopportune to discuss such questions. He found his answer in the Scott Report, which stated that justification for this consideration at the present time was to be found in the fact that no greater stimulus could be given to those now serving their country, than to know that the country, in turn, was considering their future, and that when the war was over conditions for the people as a whole would be put on a much better basis.

Mr. **J. F. Rust,** referring to the question of standardization of prices of appliances, said that much depended upon two facts—viz.: the amount of service given by undertaking "A" as compared with the service given by undertaking "B," and the types of competition which the respective undertakings were called upon to meet.

In one case, for example, the electricity supply undertaking might be laying its cable free of charge to the consumer, in which event the gas undertaking would be obliged to meet the competition by a service free of charge, some part of which cost would necessarily have to be spread over the selling prices of appliances. He considered that it was a necessary preliminary to any consideration of agreed selling prices to ascertain the programme which the local electrical undertaking proposed to follow, and that an agreement should be reached between the rival interests. Upon the question of tariffs, Mr. Rust referred to the fact that whereas the gas cooker automatically attracted, the consumer who required gas for water heating, central heating, space heating, &c., would be interested providing only that charges for gas for these purposes were competitive, and that any tariffs that might be promoted should provide specially for these comparatively heavier loads.

MANCHESTER DISTRICT ASSOCIATION OF GAS ENGINEERS

A SPECIAL MEETING of the Manchester District Association of Gas Engineers was held at the Midland Hotel, Manchester, on Sept. 1, 1942, Mr. J. L. Cooper (Yeadon), the President, in the Chair. There was a large attendance of members.

The President announced the death of an old member of the Association, Mr. W. L. Heald (Preston), and the members of the Association rose in token to his memory.

The President said it was to have been his pleasure to welcome Dr. E. W. Smith (Director-General of Gas Supply), but unfortunately Dr. Smith had been taken ill. He was sure that no one would be more disappointed than Dr. Smith himself at not being able to be present.

They were, however, fortunate in having with them Mr. James Ronca, who was connected with the Gas Administration Department of the Ministry of Fuel and Power, and had kindly undertaken, at extremely short notice, to step into the breach.

The President added that an important step taken by the Ministry of Fuel and Power had been the appointment of liaison officers, and they were glad to see present Mr. Alfred Fisher, the Liaison Officer to the Gas Directorate for the three northern regions—namely, the North-West, the North-East, and the North. Mr. Fisher was doing very good work which was being increasingly appreciated.

Mr. Ronca's Address

Mr. Ronca said:

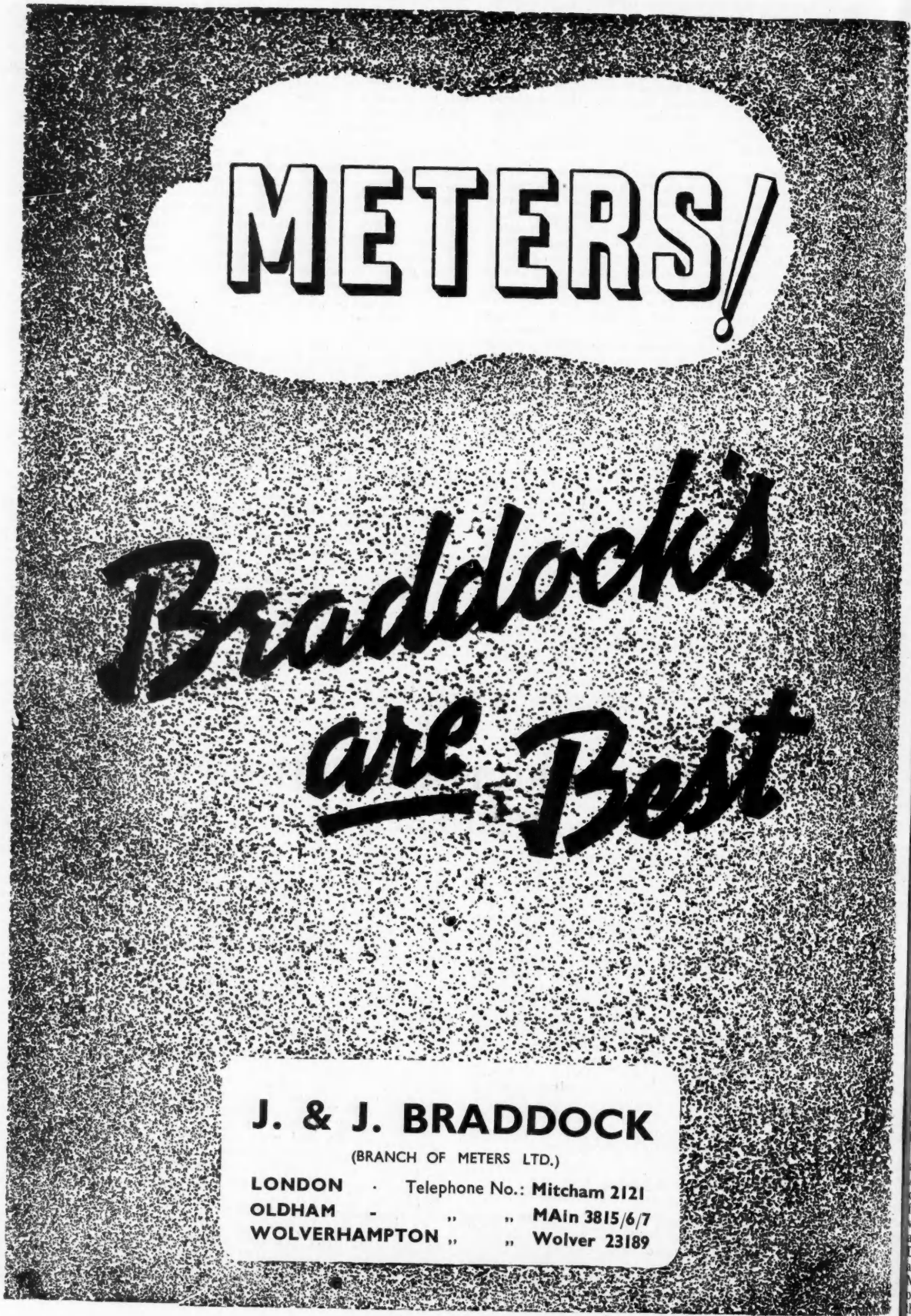
Your President has already praised the work which our liaison officers are doing, and I should like to praise that work also from my own point of view. They keep us in touch with what the districts are thinking, and from two or three of the liaison officers I had the same story, and that story, to a certain extent, has been concerned with what I will call troubles which are common all over the country. I am going to touch on these troubles, but not to hold out hopes that we in the Directorate are going to abolish them with the wave of a wand. I am going to appeal to you, as engineers particularly, to put your shoulders to the wheel.

The first trouble is labour, the second trouble is the little bother that has arisen in connexion with some requests for price increases, and the third trouble arises out of, possibly, all the remarks which have been made on post-war planning.

Dealing first with labour, you will all know the difficulties. We are in difficulties with labour at headquarters. We have great difficulty in getting the men we want; men who are suitable for and capable of doing the job. The Gas Industry is demanding a certain class of labour—a strong, heavy worker who is possibly more rare than some of the semi-skilled people.

I think we have all got to carry on short-handed; and by short-handed I mean very nearly up to the limit. The Ministry of Labour is doing all it can. We, and the liaison officers, will do what we can to get labour that is essential, but I want to warn you we shall have the greatest difficulty. There are jobs going through of absolutely primary, vital importance, in which the Supply Departments themselves are interested, in which they have not got enough men to do a job within the time that is scheduled. We cannot create labour, and I would ask you to do the best you can to get it yourselves. Get everybody working at the solution of the problem whom you think can help you. Go to the Ministry of Labour and the Local Offices. Let our own liaison officers know about your difficulties.

The second problem is price revision. I am not sure that I ought not, in a sense, to clear your own representative Council—the National Gas Council. They told you to supply one piece of information, and then you were asked for another piece of information—and this when you want a price increase authorized in respect of an increase in wages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or an increase in regard to cost of coal to go through automatically and quickly. The National Gas Council were justified in saying what they did in view of what has happened before; but it was done because it was thought we could make a simple calculation on those two items. Unfortunately in one or two of the early cases people were justified in putting in an application in any ordinary circumstances, but their balance-sheets showed that they were doing very well.

Now I am not saying that any undertaking ought not to do well. I know just as well as you do that you are operating under a system of control such as obtains in no other industry, whereby the only way of paying big dividends is to charge low prices. Yet, despite that, even with an undertaking that is regulated like that, it is difficult for a Minister to defend giving an increase in price after the Government has taken its stand by a policy of pegging prices as far as possible. So it was quickly realized that a simple, automatic method could not be undertaken and there must be certain other information given. I know that subsequently you got from the Ministry of Fuel and Power a request for an answer to certain questions, asking you for further particulars about your undertakings and what you have been doing. Answer as well as you can. I do not think that is going to cause much more delay. It is a collection of information that has to be looked at and considered as a whole in order to ascertain whether, broadly speaking, there is an undertaking in regard to which an increase can be justified.

The third point is planning. The Directorate is there to work with you and for you; and it is for you to work with the Directorate and help the Directorate to do the job properly.

When the Directorate was formed Dr. Smith was asked to do two big jobs. The first job was to see immediately that essential war factories got supplies of gas, and also to indicate what steps ought to be taken in Gas Industry reorganization. The second point is obviously, from the Directorate's point of view, a long-term policy. It has been possible only to give a comparatively short time to the consideration of that aspect of the problem.

When it comes to planning, a great number of you have put up schemes of one kind and another; and there has been a large number of "another." They are all put up in this kind of way: "This ought to be done now, and then after the war it will be all right." If it has to be done now, the proposal is often associated with something like A.R.P., or putting an insurance on the gas supply in the district. But we have not labour to spare on main laying for any extensive scheme that is just a broad, general desirability as distinct from a specific and an immediate necessity.

Mr. **James Carr** (Stretford) asked whether the Department was doing anything to assist them to retain their existing stokers; especially those they had been able to get back from the Forces. There was one point which Mr. Ronca did not touch upon—namely, rubber restriction for conveyor belting. There were those who had conveyor belts and were moving coal continuously; not merely during the stocking period, but continually in and out of stock owing to shortage. There would be an increase in their rubber requirements for belt conveyors. They were told to take risks by keeping down to the minimum. To give an example: Three weeks ago 300 wagons came in. That morning 16 wagons came in, and he was taking out of stock and was using all his rubber belting. This had been going on all summer; so that instead of half-consumption of his rubber requirements for belt conveyors there was double.

With regard to labour, he thought this point ought to be stressed at the local Labour Exchange, especially with the Chief Officer controlling matters in the Manchester Area. They had rather an idea that they could use women *ad lib*. But they could not put women in the retort house, on benzole plants, and so forth. He had had as many as 50 women and he had to reduce them as a failure. He had about 30 now. At a gas-works there was dispersed labour; it was not controlled labour.

Mr. **Ronca** said he would ask Mr. Fisher to answer the question about stokers. The second point was about rubber. The fact was that the rubber would not be there for certain. The bulk of the world's natural rubber had gone into enemy hands. The other point was in connexion with labour. Mr. Carr had pointed out that he could not use women as much as the Labour Ministry thought he could. Well, he, the speaker, was not the Labour Ministry. Mr. Carr had had 50 women and retained 30. That was 60%. An undertaking not 100 miles away had had 100 offered to it in the last four months, and it has retained 14. During the last war he saw women working in the retort houses in Scotland. In this country in this war he had seen women working on water-gas plants, not hand-operated plants. He thought they had to get a lot of women into the heavier part of the Industry.

Mr. **Fisher** said he looked upon the labour problem as constituting about 90% of the problems with which they were being confronted. As far as the Gas Directorate was concerned, and himself as liaison officer, the solution of the labour problem was not one of their real functions. It was the responsibility of the Ministry of Labour. They were trying to help to maintain supply of labour, but they had no authority. If the Ministry of Labour made a certain decision the Directorate put up the strongest case they could, and invariably it was acted upon. Regarding Mr. Carr's question about releases, I think Mr. Carr had in mind two cases of stokers for whom release was obtained from the Army. Once an enlistment notice had been made the question of what should happen was entirely in the hands of the military authorities. They had been successful, in some cases, in getting releases temporarily. In some cases they had obtained indefinite releases. But each case had to be taken on its merits, and they had no power apart from the power of persuasion. Then there was the question of the substitution of women. He was satisfied, from the intimate contact he had had with many of those present, that there was still much to be done in the way of helping themselves. The difficulties were realized, but it was no good protesting against what the Directorate was doing, and trying to blame the Directorate for not being able to do this, that, and the other. He had only recently received quite a number of letters of the type which seemed to indicate that it was lack of attention on the part of the Directorate which was responsible for the loss of men. The matter was entirely in the hands of the Ministry of Labour, in the first place, and once these men were in the Army, it was in the hands of the military authorities. He had said recently that the position had become so acute that instead of the Gas Industry having to put up a case to hold men, they would be getting to the stage when the military authorities would have to put up a case to take them. Of course, the Army came first. It was going to be more and more difficult to hold men; and they would be nothing like as successful in the future as they had been in the past—especially when they got claims, as they still did, for young men in their early twenties. If he made an enquiry from an undertaking as to the importance of a particular individual, he was told he was absolutely irreplaceable ; but he was sure that statement was often made without giving due thought to the possibilities of replacing him.

Mr. **N. G. Appleyard** (Leeds) outlined a particular case. They had at the beginning of the war approximately 300 men who joined H.M. Forces or who went on munitions. A few weeks ago the Man Power Board approached the undertaking with reference to men leaving their service to go on munitions and other war work. They gave them a satisfactory explanation of the position. Within a fortnight afterwards the Local Unemployment Exchange came to them and demanded 67 men. They persuaded those concerned that it was impossible to allow the 67 men to go. Yesterday the Ministry of Building and Construction demanded that they should allow as many men as possible to go to another Department for the laying of tram rails. What was the position ?

Mr. **Ronca** said that the Ministries could not take the men away compulsorily without the case being referred to the Directorate of Gas Supply. Every case of a gas-worker should be referred to the Directorate.

Mr. **J. H. Clegg** (Marsden) said that in his own works the shortage of stokers was the most serious trouble. He knew of stokers doing the work of a man and a half for four months continuously, seven shifts on seven days per week. In some cases they were doing two men's work in order to keep the holders from the ground. It was an instruction from the Government that they should maintain a supply of gas to the public. The public were not told they must economize seriously in the use of gas, or had not been told so until the last fortnight. The consumption of gas has increased since then and rather alarmingly so.

There was another point upon which he would like to appeal to Mr. Ronca. It was that in considering the applications for an increase in the price of gas it should be recognized that there were many burdens on gas departments which they had borne, and that in the case of municipal gas undertakings it was not their intention to make excessive profits but merely to provide for advances in the price of materials, &c. Furthermore, many undertakings did not, in the early days of the war, advance their prices similarly to the prices advanced in the London areas.

Mr. **Ronca** said he thought the Gas Industry had behaved wonderfully. Mr. Clegg had cited stokers doing 1½ men's work, and even two men's work. He knew many cases like that. In the case of small undertakings he had known men who were running the works going on stoking on Saturdays and Sundays because there were no stokers available.

There seemed to have been some confusion about the applications to increase prices. If they were going to put in an application to increase prices under the 1920 Act because the costs of production had correspondingly increased, the procedure for that was all laid down. If there was opposition they were going to have counsel on the one side and counsel on the other side. If they were going to cover their ordinary general increases in costs of production, there was no hope of getting that through quickly, because the procedure was laid down statutorily and the time could not be reduced seriously.

The position with regard to labour and coal was this. There were some undertakings that were going to be seriously hit unless they could increase the price before next quarter. They said: "We do not want to lose the extra cost of those two rises next quarter; do something quickly." He hoped to act quickly. It was suggested there should be an application on those two items, largely without prejudice to the general way one. If they made it on the general one it was going to be a long job. If they wanted a rapid procedure they must frame a restrictive application, but without prejudice to any future application they might make in respect of other items.

(*To be concluded*)

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Gas Products Prices

The London Market Sept. 28.

Apart from the fact that 95/160 Solvent aphtha is to-day about 2s. 6d. per gallon aked *ex* Sellers' Works, there are no changes the prices of Coal Tar Products in the ondon Market.

The Provinces Sept. 28.

The average prices of gas-works products uring the week were: Pitch and Crude Tar,* oluole, naked, North, 90's, 1s. 10d., pure, 5d. (controlled by the Control of Toluene o. 2 Order, July 3, 1941, which fixes the aximum price at which this material may be ld). Coal tar, crude naphtha, in bulk, North, to 1s. 4d. according to quality. Solvent aphtha, naked, North, 2s. 2d. to 2s. 6d. Heavy naphtha, North, 1s. 10d. to 1s. 11d. Carbolic acid, 60's, controlled by the Coal Tar Acids Prices (Inland) Order, 1942, operative from May 1. Naphthalene, controlled by the Naphthalene prices (Inland) Order, 1942, dated April 15, 1942, and operative from May 1, 1942, £19 to £19 10s.—bags free. Anthracene, controlled by the Anthracene Prices (Inland) Order, 1942, operative from May 1. Filtered heavy oil (min. gr. 1,080), 7½d. to 8d. Creosote oil has been generally controlled as to direction and price for some time past. Current value—fuel grades 5d. to 5¼d; timber preservation and other purposes 4¾d. to 6d. These prices apply as from May 13.

*In regard to pitch and crude tar prices we would ask readers to refer to the editorial note on p. 396 of the "JOURNAL" for Sept. 10, 1941.

Tar Products in Scotland Sept. 26.

Enquiries are numerous with prices steady. Refined tar controlled. Value is 4½d. per gallon *ex* Works, naked. Creosote oil: Specification oil, 6¾d. to 7d.; low gravity, 7¼d. to 7½d.; neutral oil, 6¾d. to 7d. per gallon; all *ex* Works in bulk. Cresylic acid is in good call at 3s. 6d. to 4s. 6d. per gallon *ex* Works, naked, according to quality. Crude naphtha 6½d. to 7d. Solvent naphtha: 90/160 grade, 2s. to 2s. 3d., and 90/190 Heavy naphtha, 1s. 9d. to 2s. per gallon. Pyridine: 90/160 grade, 13s. and 90/140 grade, 15s. per gallon.

Gas Stocks and Shares

Stock Markets were distinctly brighter last eek. There was a good recovery in long-ted British Funds and a number of active atures among industrials. Gas Stocks and ares were also in better demand and several ding ordinaries improved in value. Gas ght units closed 3d. higher and a sharp rise 8 points was recorded by Barnet ordinary—e stock changing hands at 137 against the t transaction in July at 129. In the Supple-entary List a parcel of Cambridge "B" stock ched 136 and the quotation closed 5 up; the recorded transaction in this stock was in y, 1941, at 103½. On the local exchange effield ordinary was marked up 2 points.

The following is the full list of changes during the week:

OFFICIAL LIST

Barnet Ord.	133—138	+8
British 4 p.c. Red. Deb.	80—85	+3
Croydon 5 p.c. Deb....	109—114	+1
Gas Light Units	13/—14/-	+-/3d.
Ditto 3 p.c. Deb.	76—81	−1
South Metropolitan 6 p.c. Pref. ...	82—87	+2
South Suburban 5 p.c. Deb.... ...	109—114	+1
Wandsworth	109—114	+1

SUPPLEMENTARY LIST

Cambridge "B"	130—140	+5

PROVINCIAL EXCHANGE

Sheffield...	128—131	+2

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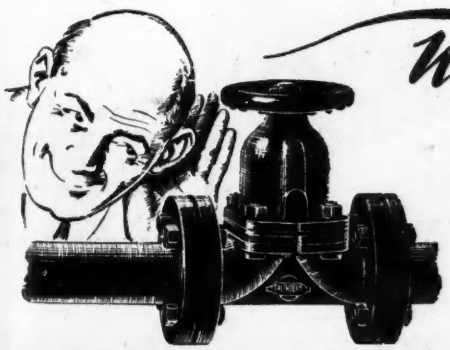

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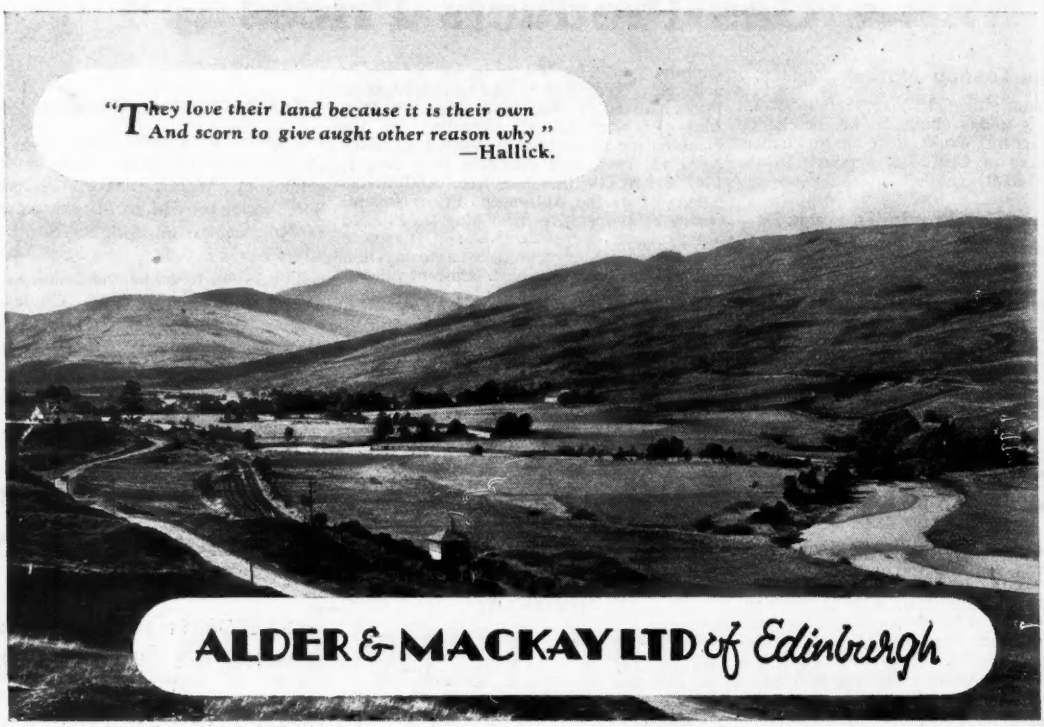
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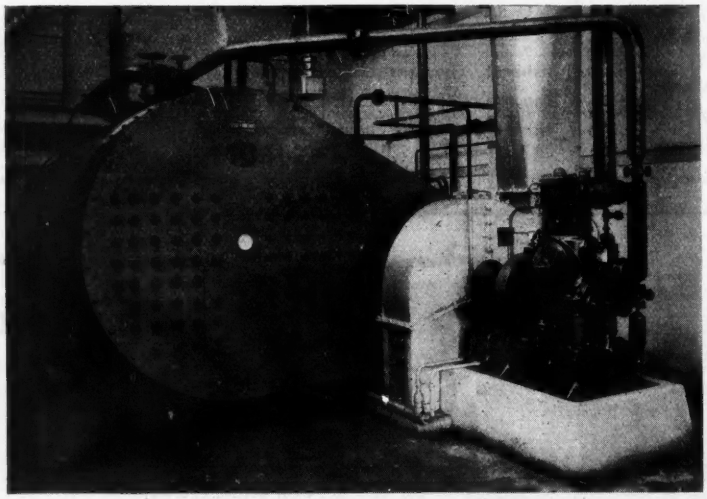

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